

3764-78  
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UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

JULY 12, 2001

PTAS



\*101697551A\*

NIXON & VANDERHYE P.C.  
LEONARD C. MITCHARD  
1100 NORTH GLEBE ROAD  
8TH FLOOR  
ARLINGTON, VA 22201

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 04/23/2001

REEL/FRAME: 011736/0481  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
GARMAN, ANDREW J.

DOC DATE: 04/04/2001

ASSIGNEE:  
ASTRAZENECA AB  
S-151 85  
SODERTALJE, SWEDEN

SERIAL NUMBER: 09763827  
PATENT NUMBER:

FILING DATE: 04/23/2001  
ISSUE DATE:

SAUNDRA BALLENGER, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

05-02-2001

Rec'd PCT/PTO 23 APR 2001

U.S. Department of Commerce  
Patent and Trademark Office

101697551

## RECORDATION FORM COVER SHEET

09/763827

Our Ref.: 3764-78

## PATENTS ONLY

Commissioner of Patents and Trademarks  
Box Assignment, Washington, D.C. 20231

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies): Andrew J. Garman</p> <p>Additional name/s of conveying party/ies attached? <input type="checkbox"/></p> <p>3. Nature of conveyance:  <input checked="" type="checkbox"/> Assignment      <input type="checkbox"/> Merger  <input type="checkbox"/> Security Assignment      <input type="checkbox"/> Change of Name  <input type="checkbox"/> Other</p> <p>Execution Date: April 4, 2001</p>	<p>2. Name and address of receiving party(ies):</p> <p>Name: AstraZeneca AB  Internal Address:  Street Address: S-151 85</p> <p>City: Sodertalje  State/Country: Sweden  Zip:</p> <p>Additional name/s &amp; address/es attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>			
<p>4. Application number(s) or patent number(s):  If this document is being filed together with a new application, the execution date of the application is:</p> <table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>A. Patent Application No(s).  (1) 09/763,827  (2)  (3)</p> </td> <td style="width: 50%; vertical-align: top;"> <p>B. Patent No(s).  (1)  (2)  (3)</p> </td> </tr> </table> <p style="text-align: center;">Additional numbers attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		<p>A. Patent Application No(s).  (1) 09/763,827  (2)  (3)</p>	<p>B. Patent No(s).  (1)  (2)  (3)</p>	
<p>A. Patent Application No(s).  (1) 09/763,827  (2)  (3)</p>	<p>B. Patent No(s).  (1)  (2)  (3)</p>			
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: Leonard C. Mitchard  Internal Address:  Street Address: Nixon &amp; Vanderhye P.C.  1100 North Glebe Road  8<sup>th</sup> Floor  City: Arlington State: VA Zip: 22201</p>	<p>6. Total number of applications &amp; patents involved: 1</p> <p>7. Total fee (37 CFR 3.41) \$ 40.00  <input checked="" type="checkbox"/> Enclosed  <input type="checkbox"/> Authorized to be charged to deposit account #14-1140</p> <p>8. The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper thereafter filed in this application by this firm) to our Account No. 14-1140.</p>			
DO NOT USE THIS SPACE				
<p>9. Statements and signature.  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</p> <table style="width: 100%;"> <tr> <td style="width: 30%; text-align: center;"> <p>Leonard C. Mitchard  Name of Person Signing  Reg. No. 29,009</p> </td> <td style="width: 30%; text-align: center;"> <p>  Signature</p> </td> <td style="width: 40%; text-align: center;"> <p>April 23, 2001  Date</p> </td> </tr> </table> <p style="text-align: right;">Total number of pages including original cover sheet, attachments, and document: [3]</p>		<p>Leonard C. Mitchard  Name of Person Signing  Reg. No. 29,009</p>	<p>  Signature</p>	<p>April 23, 2001  Date</p>
<p>Leonard C. Mitchard  Name of Person Signing  Reg. No. 29,009</p>	<p>  Signature</p>	<p>April 23, 2001  Date</p>		

04/25/2001 MNGUYEN 00000114 09763827

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**ASSIGNMENT FOR PATENT APPLICATION**  
**(All Rights)**

Z70409/UST

WHEREAS, ANDREW JOHN GARMAN, (hereinafter Assignor of) Alderley Park, Macclesfield, Cheshire, SK10 4TG, United Kingdom, respectively, has invented a certain improvement in DEVICE COMPRISING A MICROFABRICATED DIFFUSION CHAMBER for which a so-entitled application for Letters Patent of the United States is being concurrently executed herewith; was filed in the United States Patent and Trademark Office on under Serial No.

WHEREAS, AstraZeneca AB (hereinafter ASSIGNEE), a corporation of the State of Sweden, having an office and place of business at S-151 85, Sodertalje, Sweden is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNORS by these presents hereby sell, assign, and transfer unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNORS' entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres; and the ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and

agreed that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;

ASSIGNORS hereby agree to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and

ASSIGNORS hereby agree, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.

AGREED and executed as noted below:

April 4, 2001  
Date  
Witnessed by: David Neberg  
Name:

A.J. Garman  
ANDREW JOHN GARMAN  
4th April 2001  
Date:

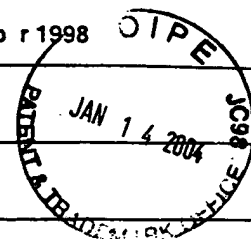
FORM PTO-1390 (REV 11-2000)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER <b>3764-78</b>
<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371</b>		U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)  <b>09/763,827</b>
INTERNATIONAL APPLICATION NO. <b>PCT/GB99/03374</b>	INTERNATIONAL FILING DATE <b>11 Oct ber 1999</b>	PRIORITY DATE CLAIMED <b>13 Oct b r 1998</b>
TITLE OF INVENTION  <b>DEVICE COMPRISING A MICROFABRICATED DIFFUSION CHAMBER</b>		
APPLICANT(S) FOR DO/EO/US  <b>GARMAN</b>		

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☐ The U.S. has been elected by the expiration of 19 months from the priority date (Article 31).
5. A copy of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has **NOT** expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11 To 20 below concern document(s) or information included:**

11. ☐ An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.
13. ☐ A **FIRST** preliminary amendment.
14. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
15. ☐ A substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☐ Other it ms or information.

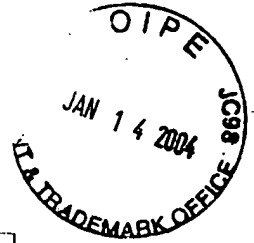




3164-78  
LCM



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
Address: ASSISTANT COMMISSIONER FOR PATENTS  
Box PCT  
Washington, D.C. 20231



U.S. APPLICATION NO.	FIRST NAMED APPLICANT	ATTY. Docket NO.
09/763827	GARMAN	A 3764-78
NIXON & VANDERHYE 1100 NORTH GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201		
INTERNATIONAL APPLICATION NO.		
PCT/GB99/03374		
I.A. FILING DATE		PRIORITY DATE
11 OCT 99		22 OCT 98
DATE MAILED: 22 MAR 2001		

**NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)**

1. The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as
- ☐ a Designated Office (37 CFR 1.494),
  - ☒ an Elected Office (37 CFR 1.495):

DOCKETED

☒ U.S. Basic National Fee.

☒ Copy of the international application in:

☐ a non-English language.

☒ English.

☐ Translation of the international application into English.

☐ Oath or Declaration of inventors(s) for DO/EO/US.

☐ Copy of Article 19 amendments.

☐ Translation of Article 19 amendments into English.

☒ The International Preliminary Examination Report in English and its Annexes, if any.

☐ Translation of Annexes to the International Preliminary Examination Report into English.

☒ Preliminary amendment(s) filed 27 FEB 2001 and

☐ Information Disclosure Statement(s) filed and

☐ Assignment document.

☐ Power of Attorney and/or Change of Address.

☐ Substitute specification filed

☐ Verified Statement Claiming Small Entity Status.

☒ Priority Document.

☒ Copy of the International Search Report ☒ and copies of the references cited therein.

☒ Other: PTO 1449; IB 306

2. The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

☐ a. Translation of the application into English. Note a processing fee will be required if submitted later than the appropriate 20 or 30 months from the priority date.

☐ The current translation is defective for the reasons indicated on the attached Notice of Defective Translation.

☐ b. Processing fee for providing the translation of the application and/or the Annexes later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(f)).

☒ c. Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the international application number and international filing date.

☐ The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) for the reasons indicated on the attached PCT/DO/EO/917.

☒ d. Surcharge for providing the oath or declaration later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(e)).

3. Additional claim fees of \$ \_\_\_\_\_ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due. See attached PTO-875.

**ALL OF THE ITEMS SET FORTH IN 2(a)-2(d) AND 3 ABOVE MUST BE SUBMITTED WITHIN ONE MONTH FROM THE DATE OF THIS NOTICE OR BY ☐ 21 OR ☒ 31 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

4. Translation of the Annexes **MUST** be submitted no later than the time period set above or the annexes will be cancelled. Note processing fee will be required if submitted later than 30 months from the priority date.

5. ☐ The Article 19 amendments are cancelled since a translation was not provided by the appropriate 20 (37 CFR, 494(d)) or 30 (37 CFR 1.495(d)) months from the priority date.

Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)

**A copy of this notice MUST be returned with this response.**

Enclosed:

☐ PCT/DO/EO/917

☐ Notice of Defective Translation

☐ PTO-875

FORM PCT/DO/EO/905 (December 1997)

CLT/MATTER # 3164-78  
MAIL DATE 3/22/01  
DUE DATE APR 22, 2001  
FINAL DEADLINE SEPT 22, 2001  
DOCKETED BY MK/mss

Francine Young  
Telephone: 703-305-3662

**RULE 63 (37 C.F.R. 1.63)**  
**DECLARATION AND POWER OF ATTORNEY**  
**FOR PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name, and I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the invention which is claimed and for which a patent is sought on the invention entitled: **DEVICE COMPRISING A MICROFABRICATED DIFFUSION CHAMBER**

the specification of which (check applicable box(s)):

☐ is attached hereto  
☐ was filed on \_\_\_\_\_ as U.S. Application Serial No. \_\_\_\_\_  
☐ was filed as PCT International application No. PCT/GB99/03374 on 11 October 1999  
 and (if applicable to U.S. or PCT application) was amended on \_\_\_\_\_

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. 1.56. I hereby claim foreign priority benefits under 35 U.S.C. 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed or, if no priority is claimed, before the filing date of this application:

Priority Foreign Application(s):

Application Number	Country	Day/Month/Year Filed
9822242.5	GB	13.10.1998

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

Application Number	Date/Month/Year Filed
--------------------	-----------------------

I hereby claim the benefit under 35 U.S.C. 120/365 of all prior United States and PCT international applications listed above or below and, insofar as the subject matter of each of the claims of this application is not disclosed in such prior applications in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. 1.56 which occurred between the filing date of the prior applications and the national or PCT international filing date of this application:

Prior U.S./PCT Application(s):

Application Serial No.	Day/Month/Year Filed
------------------------	----------------------

Status: patented  
 pending, abandoned

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. And on behalf of the owner(s) hereof, I hereby appoint **NIXON & VANDERHYE P.C., 1100 North Glebe Rd., 8<sup>th</sup> Floor, Arlington, VA 22201-4714, telephone number (703) 816-4000 (to whom all communications are to be directed)**, and the following attorneys thereof (of the same address) individually and collectively owners' attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith and with the resulting patent: Arthur R. Crawford, 25327; Larry S. Nixon, 25640; Robert A. Vanderhye, 27076; James T. Hosmer, 30184; Robert W. Faris, 31352; Richard G. Besha, 22770; Mark E. Nusbaum, 32348; Michael J. Keenan, 32106; Bryan H. Davidson, 30251; Stanley C. Spooner, 27393; Leonard C. Mitchard, 29009; Duane M. Byers, 33363; Jeffry H. Nelson, 30481; John R. Lastova, 33149; H. Warren Burnam, Jr. 29366; Thomas E. Byrne, 32205; Mary J. Wilson, 32955; J. Scott Davidson, 33489; Alan M. Kagen, 36178; Robert A. Molan, 29834; B. J. Sadoff, 36663; James D. Berquist, 34776; Updeep S. Gill, 37334; Michael J. Shea, 34725; Donald L. Jackson, 41090; Michelle N. Lester, 32331; Frank P. Presta, 19828; Joseph S. Presta, 35329. I also authorize Nixon & Vanderhye to delete any attorney names/numbers no longer with the firm and to act and rely solely on instructions directly communicated from the person, assignee, attorney, firm, or other organization sending instructions to Nixon & Vanderhye on behalf of the owner(s):

Inventor's Signature: <u>Andrew J Garmann</u>	Date: <u>24 April 2001</u>
Inventor: <u>ANDREW J GARMAN</u>	<u>British</u>
(first) <u>MI</u> (last)	(citizenship)
Residence: (city) <u>Cheshire</u> (state/country) <u>United Kingdom</u>	
Post Office Address: <u>Alderley Park, Macclesfield, Cheshire. SK10 4TG, United Kingdom</u>	
(Zip Code)	
Inventor's Signature: _____	Date: _____
Inventor: _____	_____
(first) <u>MI</u> (last)	(citizenship)
Residence: (city) _____ (state/country) _____	
Post Office Address: _____	
(Zip Code)	

FOR ADDITIONAL INVENTORS, check box ☐ and attach sheet with same information and signature and address for each.



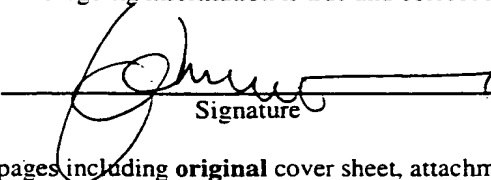
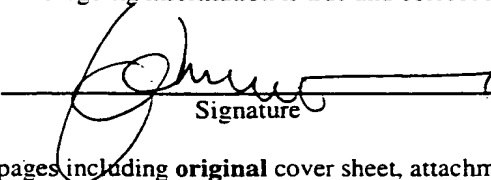
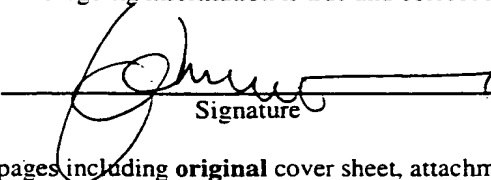
RECORDATION FORM COVER SHEET

PATENTS ONLY

Our Ref.: 3764-78

Commissioner of Patents and Trademarks  
Assignment, Washington, D.C. 20231

to the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies): Andrew J. Garman</p> <p>Additional name/s of conveying party/ies attached? <input type="checkbox"/></p> <p>3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Assignment <input type="checkbox"/> Change of Name <input type="checkbox"/> Other</p> <p>Execution Date: April 4, 2001</p>		<p>2. Name and address of receiving party(ies):</p> <p>Name: AstraZeneca AB Internal Address: Street Address: S-151 85 City: Sodertalje State/Country: Sweden Zip:</p> <p>Additional name/s &amp; address/es attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>				
<p>4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is:</p> <table border="0"><tr><td>A. Patent Application No(s). (1) 09/763,827 (2) (3)</td><td>B. Patent No(s). (1) (2) (3)</td></tr></table> <p>Additional numbers attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>				A. Patent Application No(s). (1) 09/763,827 (2) (3)	B. Patent No(s). (1) (2) (3)	
A. Patent Application No(s). (1) 09/763,827 (2) (3)	B. Patent No(s). (1) (2) (3)					
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: Leonard C. Mitchard Internal Address: Street Address: Nixon &amp; Vanderhye P.C. 1100 North Glebe Road 8<sup>th</sup> Floor City: Arlington State: VA Zip: 22201</p>		<p>6. Total number of applications &amp; patents involved: 1</p> <p>7. Total fee (37 CFR 3.41) \$ 40.00 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account #14-1140</p> <p>8. The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper thereafter filed in this application by this firm) to our Account No. 14-1140.</p>				
<b>DO NOT USE THIS SPACE</b>						
<p>9. Statements and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</p> <table border="0"><tr><td>Leonard C. Mitchard Name of Person Signing Reg. No. 29,009</td><td> Signature</td><td>April 23, 2001 Date</td></tr></table> <p>Total number of pages including original cover sheet, attachments, and document: [3]</p>				Leonard C. Mitchard Name of Person Signing Reg. No. 29,009	 Signature	April 23, 2001 Date
Leonard C. Mitchard Name of Person Signing Reg. No. 29,009	 Signature	April 23, 2001 Date				

**ASSIGNMENT FOR PATENT APPLICATION**  
**(All Rights)**

WHEREAS, ANDREW JOHN GARMAN. (hereinafter Assignor of) Alderley Park, Macclesfield, Cheshire, SK10 4TG, United Kingdom, respectively, has invented a certain improvement in DEVICE COMPRISING A MICROFABRICATED DIFFUSION CHAMBER for which a so-entitled application for Letters Patent of the United States is being concurrently executed herewith; was filed in the United States Patent and Trademark Office on under Serial No. ;

WHEREAS, AstraZeneca AB (hereinafter ASSIGNEE), a corporation of the State of Sweden, having an office and place of business at S-151 85, Sodertalje, Sweden is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNORS by these presents hereby sell, assign, and transfer unto the said ASSIGNEE, its successors, assigns, and legal representatives. ASSIGNORS' entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres; and the ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and

agreed that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;

ASSIGNORS hereby agree to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and

ASSIGNORS hereby agree, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.

AGREED and executed as noted below:

April 4, 2001  
Date  
Witnessed by:  
David Neberg  
Name:

A. J. Garman  
ANDREW JOHN GARMAN  
4th April 2001  
Date: